What is claimed is:

1. An information processing device for performing broadcasting communications by a transmitter transmitting data to each of a plurality of receivers using a processor provided on a transmitter side, comprising:

a transmission unit generating a packet for each receiver based on information about a receiver and transmission data provided by the processor through an input/output bus, and transmitting the packet to a connected network; and

a unit connecting said transmission unit to the processor of said information processing device trough the input/output bus.

2. The device according to claim 1, further comprising

a plurality of said transmission units, wherein

said processor of said information processing device provides the same transmission data for the plurality of transmission units through the input/output bus, and provides a different piece of receiver information for each transmission unit.

3. The device according to claim 1, wherein:

said transmission unit comprises:

a transmission schedule unit controlling a transmission schedule including a transmission order and transmission timing of a packet;

a receiver information management unit managing the receiver information;

a buffer unit storing and managing the transmission data; and

a packet unit generating a packet for a specified receiver according to the transmission schedule, and transmitting the packet.

4. The device according to claim 3, wherein said transmission unit further comprises a transmission data input unit obtaining transmission data without receiving the transmission data from the processor of said information processing device.

5. The device according to claim 3, further comprising:

a plurality of the transmission units; and

at least one input transmission unit comprising a transmission data input unit obtaining

transmission data without receiving the transmission data from the processor of said information processing device, wherein

transmission data is provided from said input transmission unit to another transmission unit through the input/output bus.

6. The device according to claim 3, wherein said transmission schedule unit provides identification information for obtaining information about a specified receiver from information managed by said receiver information management unit, identification information for obtaining, from said buffer unit, data to be transmitted to the specified receiver, and information relating to transmission of a packet based on an order and timing predetermined for said packet unit.

7. The device according to claim 6, wherein said information relating to transmission of a packet contains information relating to a time at which a packet has previously been transmitted, and a time at which a packet is to be transmitted next time.

8. The device according to claim 3, wherein:

said information about a receiver contains information required by said packet unit to generate a packet for each receiver; and

said receiver information management unit transfers to said packet unit the information about a receiver corresponding to the receiver specified by said packet unit.

9. The device according to claim 8, wherein:

said information about a receiver is formed in a format of packet header information required when the transmission data is to be transmitted to a network; and

said information about a receiver contains change information for identification of a fixed portion and a portion to be changed for each packet.

10. The device according to claim 9, wherein

said packet unit processes only a portion to be changed in information according to the change information, generates packet header information using a fixed portion as a portion corresponding to the information about the receiver, generates a

packet by combining the transmission data with the packet header information, and transmits the packet to a network.

5   11.   The device according to claim 3, wherein said buffer unit manages management information for management of the transmission data, and auxiliary information for generation of a packet by said packet unit in addition to the 10   transmission data.

12.   The device according to claim 11, wherein said buffer unit divides the transmission data into transmission data blocks having a 15   predetermined length, and manages said transmission data block with the management information and the auxiliary information added to the block.

13.   The device according to claim 12, wherein: 20   said management information is information relating to a length of the transmission data block, and information relating to a number of receivers who are to receive the transmission data block; and said auxiliary information refers to an error 25   detection code of the transmission data block.

14. The device according to claim 13, wherein:

said information relating to the number of receivers to receive the transmission data block is represented by a counter showing a number of receivers requiring the transmission data block;

a corresponding counter increases its value by 1 each time said transmission schedule unit refers to the transmission data block as data to be transmitted to a receiver;

a corresponding counter decreases its value by 1 each time said packet unit completes transmitting the transmission data block; and

said corresponding transmission data block is discarded when said buffer unit decreases said counter by 1 into 0.

15. The device according to claim 13, wherein

said error detection code is a checksum of the transmission data block.

16. The device according to claim 15, wherein

said checksum is obtained as a result of computing a sum of complements of 1 in a length unit equal to or longer than 16 bits predetermined

for the transmission data block.

17.   The device according to claim 3, wherein
said transmission unit further comprises:

a reception unit receiving a packet from a network;

a received packet identification unit identifying whether or not the packet received by said reception unit can be processed by said transmission unit; and

a received packet processing unit processing the packet determined as processable by said received packet identification unit, and transferring the packet determined as unprocessable to the processor of said information processing device.

18.   A network adapter provided in an information processing device which performs broadcasting communications by a transmitter transmitting data to each receiver to a plurality of receivers, comprising:

a transmission schedule unit controlling a transmission schedule including a transmission order and timing of a packet;

a receiver information management unit managing information about the receivers;

a buffer unit storing and managing transmission data; and

5   a packet unit generating a packet for a specified receiver according to the transmission schedule, and transmitting the packet.

19. The network adapter according to claim 18,
10 further comprising

a transmission data input unit obtaining transmission data without receiving transmission data from a processor of said information processing device.

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20. The network adapter according to claim 18, further comprising:

a reception unit receiving a packet from a network;

20   a received packet identification unit identifying whether or not the packet received by said reception unit can be processed by said network adapter; and

a received packet processing unit processing
25 the packet determined as processable by said

received packet identification unit, and transferring the packet determined as unprocessable to the processor of said information processing device.

21. A method for generating a packet by an information processing device on a transmitter side for performing broadcasting communications, and transmitting the packet, comprising:

generating a packet for each receiver by a network adapter in said information processing device based on information about a receiver from a processor of said information processing device and transmission data; and

transmitting the generated packet by the network adapter of said information processing device.

22. The method according to claim 21, wherein said network adapter of said information processing device generates and transmits a packet for a specified receiver according to a transmission schedule including a transmission order and timing of the packet.

23.   The method according to claim 22, further
comprising:

holding information about the receiver in a
format of packet header information in advance; and

dividing the transmission data into blocks,
and holding the blocks with management information
corresponding each block and auxiliary information
for generation of a packet added to each block.

24.   An   information   processing   device   for
performing   broadcasting   communications   by   a
transmitter   transmitting   data   to   each   of   a
plurality of receivers using a processor provided
on a transmitter side, comprising:

transmission means for generating a packet for
each receiver based on information about a receiver
provided by the processor through an input/output
bus and transmission data, and transmitting the
packet to a connected network; and

means for connecting said transmission means
to the processor of said information processing
device trough the input/output bus.